REMARKS

Reconsideration and withdrawal of the rejections set forth in the Office Action dated January 17, 2007, is respectfully requested in view of this amendment. By this amendment, claims 1, 3 and 4 have been cancelled, claim 2 has been amended, and new claims 5-7 have been inserted. Claims 2 and 5-7 are pending in this application.

New claims 5-7 set forth the features of a light emitting device emitting a modulated data signal, a lens and beam splitter, an optical reflection system, a second lens, a light receiving device, and a pilot light emitting section. The claims also describe the transmission and reflection of the light, and also describe the light wavelengths. It is respectfully submitted that the above amendments introduce no new matter within the meaning of 35 U.S.C. §132.

The Office Action of January 17, 2007, has been reviewed and the comments therein carefully considered.

In the outstanding Office Action:

Claims 1, 3, 4 were rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeta et al. (6,616,352, hereinafter *Shigeta*) in view of *Hogan* (3,790,277). Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Shigeta* and *Hogan* as applied to claim 1 above, and further in view of Yoshida et al.(6,870,871, hereinafter *Yoshida*).

Applicant claims:

> "... a first lens that shapes the data signal light ... into approximately parallel beams; a beam splitter ... [a] pilot light pilot light emitting section emitting the pilot signal toward the target apparatus ... , the pilot light emitted from the pilot light emitting section is transmitted directly toward the target apparatus not via the beam splitter and the optical reflection system, and the data signal light and the pilot light transmitted from the target apparatus is reflected by the optical reflection system, reflected by the beam splitter, transmitted through the second lens, and received by the light receiving device, and ... the pilot light ranges from 930 nm to 960 nm and the light receiving device has a light receiving sensitivity only in a wavelength region of 930 nm to 960 nm." (Claim 5; claims 6 and 7 similar.)

This combination is neither shown nor suggested by any combination of the prior art of record. It is submitted that claims 5-7 clearly point out these inventive features so as to patentably distinguish the invention over the cited references.

The present invention apparatus includes the feature of accurately detecting the position of a target apparatus by receiving a pilot light transmitted from the target apparatus even in a situation where sunlight is incident ("pilot light ... transmitted directly toward the target apparatus not via the beam splitter and the optical reflection system ... the pilot light ranges from 930 nm to 960 nm"). Specifically, according to the present subject matter, a pilot light having a wavelength region ranging from 930 nm to 960 nm, which is little affected by the sunlight, is used to carry out a light axis adjustment. Accordingly, the position of the target is accurately detected from the pilot light transmitted from the target even in a situation where sunlight is incident. Consequently, an indoor optical wireless system including an optical wireless transmission apparatus according to the present subject matter could perform a bi-directional communication with high accuracy.

Additionally, since the apparatus according to the present subject matter includes only one beam splitter, the size is smaller and the constitution thereof is simpler compared with a conventional apparatus including two beam splitters.

In this respect, *Hogan* actually discloses an optical band pass filter which passes only signals having wave lengths of 900 nm or longer. In contrast, the present subject matter has the above effect by strictly limiting the wave length to from 930 nm to 960 nm. For this reason, the applicants respectfully submit that the present subject matter is patentable over *Shigeta* and *Hogan.*

Referring to claim 2, this claim sets forth the use of lamination layers having bandgap energies different from each other in order to obtain a light receiving device having a light receiving sensitivity only in a wavelength region of 930 nm to 960 nm. This is patentably distinguishable from *Yoshida*, which is cited as teaching a light receiving layer having a

particular bandgap energy. Specifically, *Yoshida*, at column 19, lines 15-19, discloses that, "a light-receiving element in an optical communication system uses a light-receiving element made of GaInAs which has an absorption end in the vicinity of 1650 nm, beyond which the light-receiving sensitivity abruptly lowers". The applicants would like to emphasize that this sentence is intended to describe that the light-receiving element should be capable of sensing a light having a wavelength of up to 165 nm. For this reason, one of ordinary skill in the art could not come up with the idea of growing one layer having a bandgap energy on another layer having a different bandgap energy so as to obtain a light receiving device having a light receiving sensitivity only in a specific wavelength region.

Applicants respectfully submit that the prior art of record fails to show or suggest the inventive features set forth in claims 2 and 5-7, taken either alone or in combination. Applicants respectfully request that the Examiner withdraw the rejections and that the case be passed to issuance.

CONCLUSION

In light of the foregoing, Applicants submit that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner call the undersigned.

Respectfully submitted,
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